

Chapter 8 Section 2 (p. 287)

BORROWING MONEY

DEFINE THE FOLLOWING:

1) Installment Loan

loan repaid in several
equal payments.
(larger)

2) Down Payment:

portion of cash price
of item (%)

Formula: $(\%) (\text{selling price})$

3) Amount Financed:

 borrowed
 owed

FORMULA:

Selling price — down payment

4) What are some thing that you might take out a loan for?

- car
- house (mortgage)
- TV / furniture
- personal

EXAMPLES:

5) Tim goes to the store to buy a new plasma TV. The TV costs \$2100. He can't afford all of that right now, so he decides to make a down payment and finance the rest. He makes a down payment of \$250, and finances the rest. How much does he finance?

borrow/owe

$$\begin{array}{r} 2100 \\ - 250 \\ \hline \$1850 \end{array}$$

6) Rebecca wants to buy a washer and dryer for \$1400. She is using the store's payment plan which says that she needs to put 30% down.

a. What is her down payment?

$$1400 \times 0.30 = \$420$$

b. What is the amount she financed?

$$\begin{array}{r} 1400 \\ - 420 \\ \hline \$980 \end{array}$$

Complete examples 7 & 8

Complete the book problems on separate paper

Ch. 8 Section 3 (p. 290) FINDING MONTHLY PAYMENTS

DEFINE:

9) Simple Interest Installment Loan

paid w/ = payments
interest calculated "simple"

10) Annual Percentage Rate (APR):

% interest
yearly basis

How do we calculate the following?

11) (a) Monthly Payment

$$= \left(\frac{\text{Amt. of loan}^{(\text{borrowed})}}{100} \right) \times \left(\text{monthly payment of \$100 loan on chart} \right)$$

(b) Total Amount Repaid

$$= \left(\text{monthly payment} \right) \times \left(\# \text{ of payments/months} \right)$$

(c) Finance Charge (Interest)

$$= \left(\text{total amount repaid} \right) - \left(\text{amount financed} \right)$$

12) Where do we find the monthly payment for a \$100 loan?
What do we need to know?

**chart on formula sheet*

EXAMPLES:

13) Claire obtains an installment loan of \$2,200 to buy some new furniture. The annual percentage rate is 8%. She has 18 months to repay the loan.

- a. Is there a down payment? **NO**
- b. So, what is the amount financed? **\$2200**
- c. What is the monthly payment?

$$\left(\frac{2200}{100}\right) \times (5.91) = \$130.02$$

- d. What is the total amount repaid?

$$130.02 \times 18 = \$2340.36$$

- e. What is the finance charge?

$$2340.36 - 2200 = \$140.36$$

14) Find the following for a \$1,600 installment loan at an APR of 10% for 24 months. (no down payment)

a) Monthly payment

$$\left(\frac{1600}{100}\right) \times (4.61) = \$73.76$$

b) Total Amount Repaid

$$73.76 \times 24 = \$1770.24$$

c) Finance Charge

$$1770.24 - 1600 = \$170.24$$

15) Theo is purchasing appliances for his house. He gets an installment loan with an APR of 12%. The total cost of the appliances is \$1,399.99. The store requires a 10% down payment and 12 monthly payments. Find the following:

a. Amount Financed

$$DP = 0.10 \times 1399.99 \\ = \$140$$

$$\begin{array}{r} 1399.99 \\ - 140.00 \\ \hline \$1259.99 \end{array}$$

b. Monthly Payment

$$\left(\frac{1259.99}{100} \right) \times 8.88 = \$111.89$$

c. Total Amount Repaid

$$\$111.89 \times 12 = \$1342.68$$

d. Finance Charge

$$1342.68 - 1259.99 = \$82.69$$

Complete the book problems- SHOW ALL WORK!